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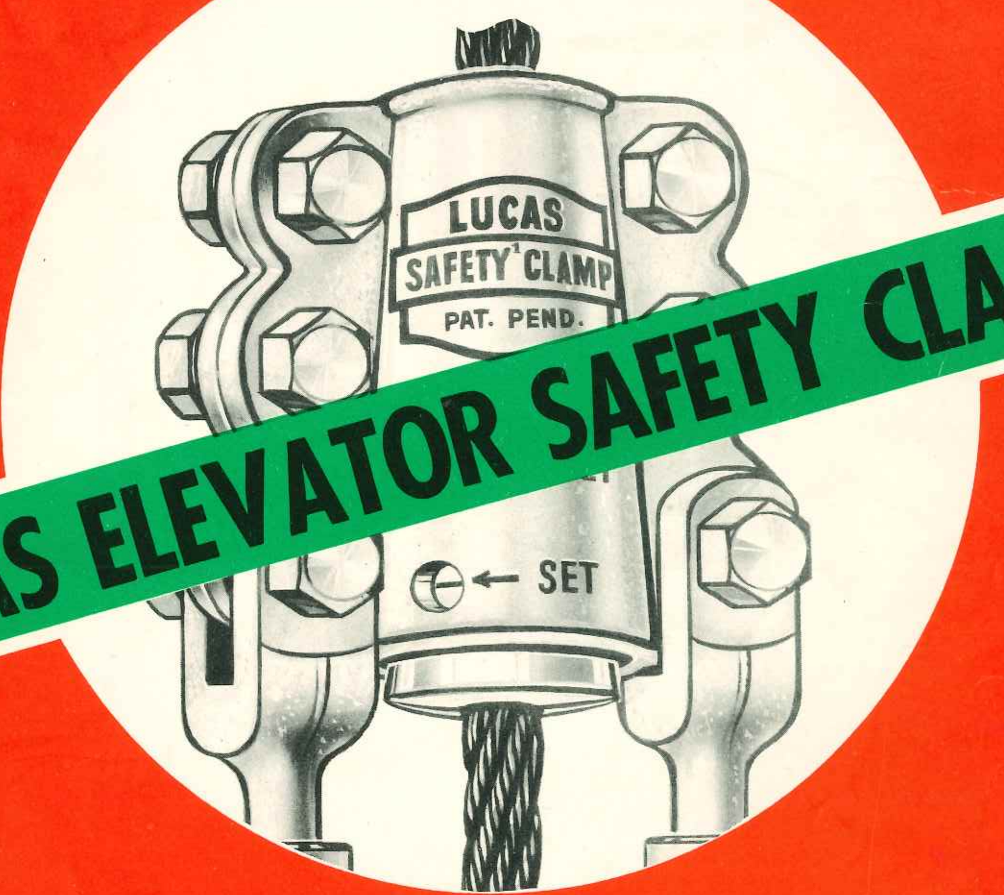
✓ [illegible]ES!

✓ REDUCE ACCIDENTS!

✓ GUARD AGAINST PROPERTY LOSS!

✓ SAVE TIME - SAVE MONEY!

...WITH



LUCAS ELEVATOR SAFETY CLAMPS

The ONLY successful safety device for the elimination of certain types of elevator accidents.

1950

SAFETY DEVICES, INC.

RD NATIONAL BANK AND TRUST BLDG. SPRINGFIELD 3, MASS.

LUCAS ELEVATOR SAFETY CLAMPS

TRIED TESTED PROVEN ACCEPTED

"They Protect Where You Can't Inspect"

- **LUCAS ELEVATOR SAFETY CLAMPS eliminate elevator accidents caused by SOCKET FAILURES of all kinds, including Wire Rope Crystallization at the point of socketing.**
- **They protect equally well in case of BOLT FAILURE at the point where wire ropes attach to the car. These hidden dangers defy inspection — upon failure they give no warning!**
- **AVERT KILLING, MAIMING ELEVATOR ACCIDENTS — PROTECT YOUR PROPERTY — INVEST IN LUCAS ELEVATOR SAFETY CLAMPS TODAY!**

Lucas Elevator Clamps Will Pay for Themselves

- The usual Public Liability Insurance policies carried by owners or users of elevators cover liability for bodily injury only. Most elevators are not now insured against property damage.
- LUCAS ELEVATOR SAFETY CLAMPS are protection not only against injury to passengers and employees, but also against property damage losses which may not be covered by insurance.
- Considerable expense to a building owner is incurred, if when, an elevator falls it lodges between floors and rescue of the occupants must be effected through the removal of a wall section.
- LUCAS ELEVATOR SAFETY CLAMPS eliminate this possibility in the event of failure of the un-inspect-able parts of an elevator.
- An "out of service" elevator can be very costly to a business . . .
  - From the standpoint of repair costs to the building and the elevator proper if the failure results from an accident.
  - From the standpoint of lost revenue occasioned by inability or unwillingness of customers to reach a business floor.
  - By increasing costs of material handling, if not tying up an operation entirely, while the elevator remains out of service.
- LUCAS ELEVATOR SAFETY CLAMPS will guard you against these possibilities.
- An elevator accident on a property is news . . . **BAD NEWS.** It creates very undesirable and unfavorable publicity which is most detrimental and costly to any business.
- LUCAS ELEVATOR SAFETY CLAMPS will spare you this embarrassment.
- **LUCAS ELEVATOR SAFETY CLAMPS** last a lifetime . . . you only have to install them once!

  They will pay for themselves by —
  - Reducing necessity for periodic re-socketing (on all drum type elevators).
  - Each re-socketing necessitates shortening the wire ropes, and after several re-socketings ropes must be replaced no matter how good they are otherwise.
  - Eliminating a myriad of damaging and costly possibilities always present in elevator failures of the nature overcome by **LUCAS ELEVATOR SAFETY CLAMPS.**
- **LUCAS ELEVATOR SAFETY CLAMPS** will save lives and eliminate maiming accidents. Anyone responsible for elevators and the safety of the public or of employees who ride elevators should, for their own protection, satisfaction and peace of mind, install **LUCAS ELEVATOR SAFETY CLAMPS** today!

LUCAS ELEVATOR SAFETY CLAMP

Protect Where You Can't Inspect!"

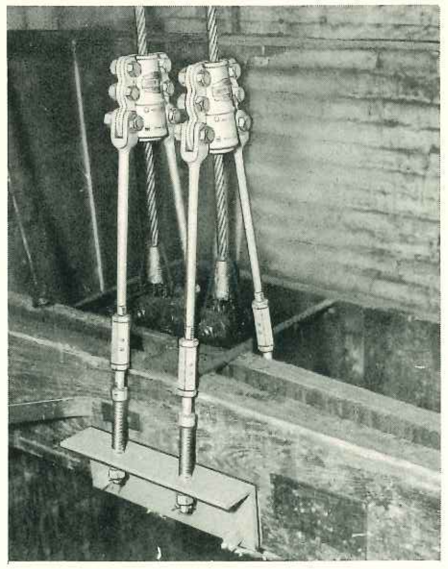


Figure 1

WOODEN CROSSHEAD, DRUM TYPE ELEVATOR INSTALLATION

Installation Requirements:**

- 2 — angle irons — minimum thickness 5/16" — of sufficient length to permit 2 thru bolts to clear all center obstructions in crosshead.
- Use 2½" x 5" Angle Iron*
  - Center the vertical 11/16" bolt holes.
  - Horizontal ¾" bolt holes 1" below center.

*This for elevators having up to 3500# load capacity. Elevators of greater capacity require correspondingly heavier angle iron.

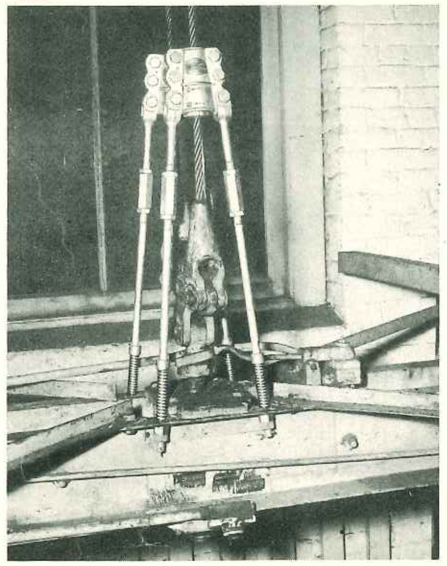


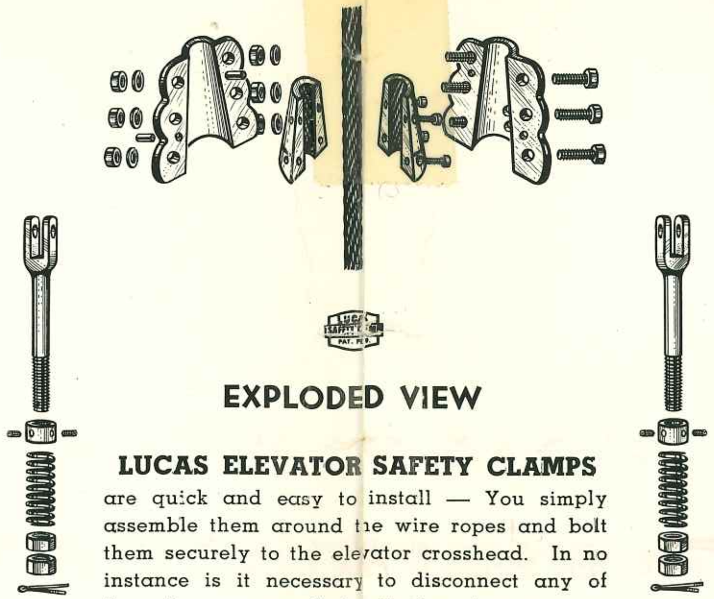
Figure 3

DIRECT TO CHANNEL FRAME, DRUM TYPE ELEVATOR WITH EQUALIZER INSTALLATION

Installation Requirements:**

- Lay out and drill 4—11/16" holes in channel frame.
- Assemble units.

Here is how the Safety Clamp appears when set and adjusted at the time of installation.



EXPLODED VIEW

LUCAS ELEVATOR SAFETY CLAMPS

are quick and easy to install — You simply assemble them around the wire ropes and bolt them securely to the elevator crosshead. In no instance is it necessary to disconnect any of the wire ropes or their attachments.

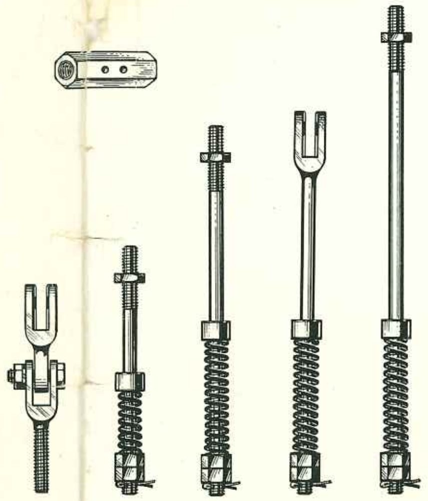
HARDWARE AND ATTACHMENTS

See installation photographs.

Note how by the combining of various length yoke bolts and extensions any desired installation may be arrived at.

Yoke Bolts available in 8" and 15" lengths.

Extension Bolts available in 10", 15" and 20" lengths



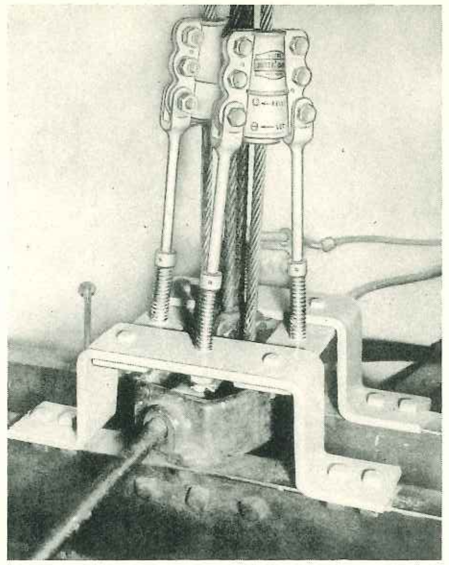


Figure 2

CORNER GUIDE-RAIL DRUM TYPE ELEVATOR INSTALLATION

Installation Requirements:**

- Lay out and prepare base mounting necessary to clear mechanism which rises above channel frame. Use ½" x 3" flat stock for base mounting.
- Drill all holes in mounting brackets and channel frame 11/16" dia.
- Use ⅝" bolts and lock washers for base mounting.
- Attach units to CAR HOIST ROPES.

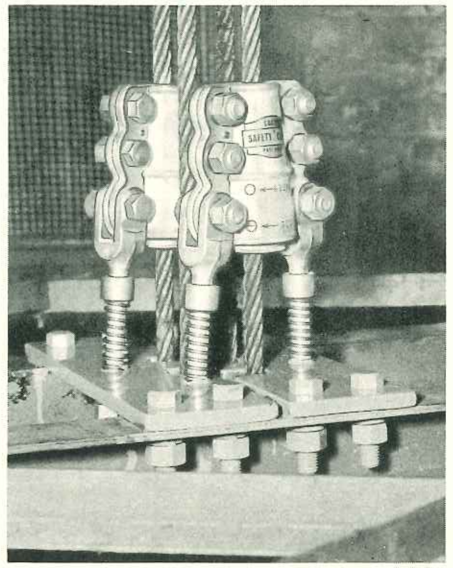


Figure 4

FOUR ROPE TRACTION ELEVATOR INSTALLATION

Installation Requirements:**

- Lay out 2—½" x 4" steel plates. (Use cardboard template)
- Prepare plates—notch out for wire ropes and drill 8—11/16" bolt holes.
- Drill necessary 11/16" holes in channel frame to correspond with bolt holes in plates.
- Use ⅝" bolts and lock washers in plate mounting.
- Assemble units on #1 and #4 ropes.

Here is how the Safety Clamp functions and PREVENTS ACCIDENTS

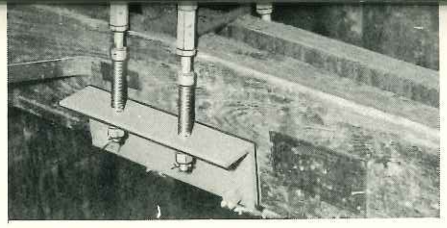


Figure 1

WOODEN CROSSHEAD, DRUM TYPE ELEVATOR INSTALLATION

Installation Requirements:**

- 2 — angle irons — minimum thickness 5/16" — of sufficient length to permit 2 thru bolts to clear all center obstructions in crosshead.
- Use 2½" x 5" Angle Iron*
    - Center the vertical 11/16" bolt holes.
    - Horizontal ¾" bolt holes 1" below center.

*This for elevators having up to 3500# load capacity. Elevators of greater capacity require correspondingly heavier angle iron.

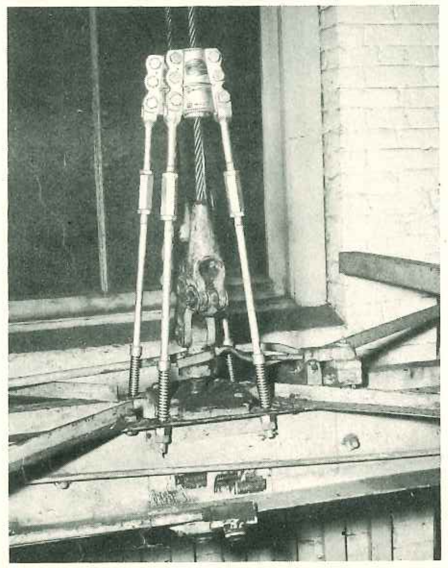


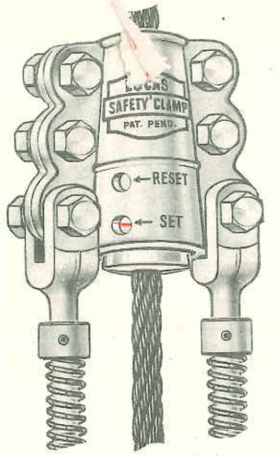
Figure 3

DIRECT TO CHANNEL FRAME, DRUM TYPE ELEVATOR WITH EQUALIZER INSTALLATION

Installation Requirements:**

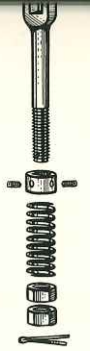
- Lay out and drill 4—11/16" holes in channel frame.
- Assemble units.

Here is how the Safety Clamp appears when set and adjusted at the time of installation.



SET VIEW

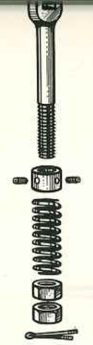
Note the red line on the clamp—how it centers the "set hole" on the clamp case. Note also,



EXPLODED VIEW

LUCAS ELEVATOR SAFETY CLAMPS

are quick and easy to install — You simply assemble them around the wire ropes and bolt them securely to the elevator crosshead. In no instance is it necessary to disconnect any of the wire ropes or their attachments.



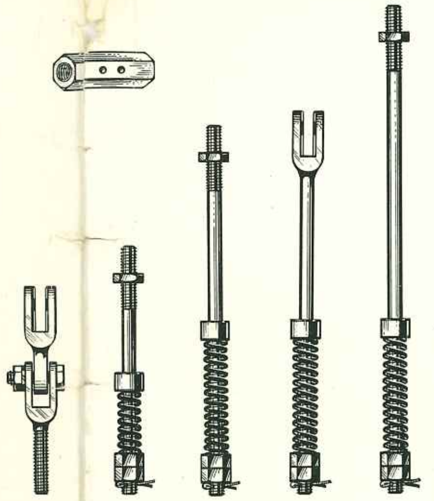
HARDWARE AND ATTACHMENTS

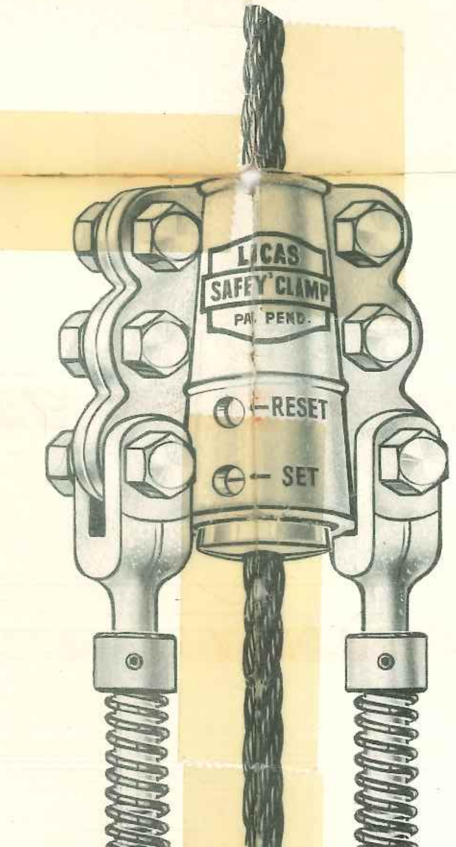
See installation photographs.

Note how by the combining of various length yoke bolts and extensions any desired installation may be arrived at.

Yoke Bolts available in 8" and 15" lengths.

Extension Bolts available in 10", 15" and 20" lengths





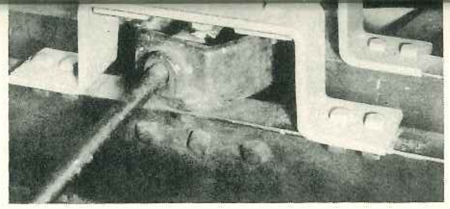


Figure 2

CORNER GUIDE-RAIL DRUM TYPE ELEVATOR INSTALLATION

Installation Requirements:**

- Lay out and prepare base mounting necessary to clear mechanism which rises above channel frame. Use ½" x 3" flat stock for base mounting.
- Drill all holes in mounting brackets and channel frame 11/16" dia.
- Use ⅝" bolts and lock washers for base mounting.
- Attach units to CAR HOIST ROPES.

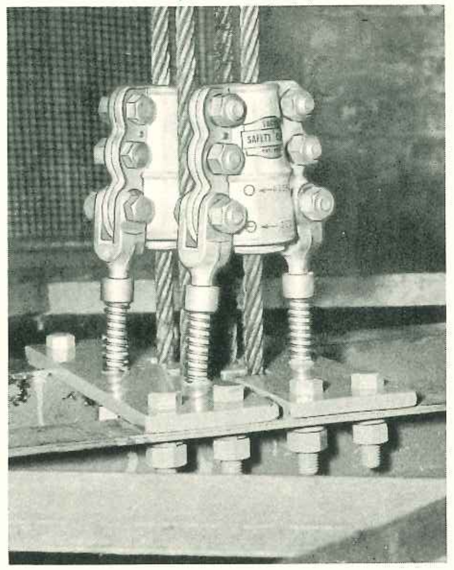


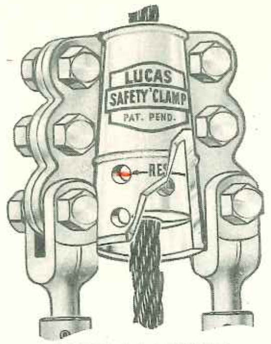
Figure 4

FOUR ROPE TRACTION ELEVATOR INSTALLATION

Installation Requirements:**

- Lay out 2—½" x 4" steel plates. (Use cardboard template)
- Prepare plates—notch out for wire ropes and drill 8—11/16" bolt holes.
- Drill necessary 11/16" holes in channel frame to correspond with bolt holes in plates.
- Use ⅝" bolts and lock washers in plate mounting.
- Assemble units on #1 and #4 ropes.

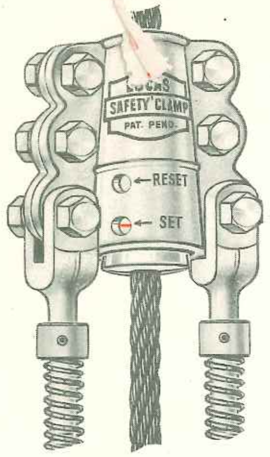
Here is how the Safety Clamp functions and PREVENTS ACCIDENTS



RESET VIEW

The Clamp, in the event of a complete failure of a socket, or any other complete failure of an elevator part which the Clamp is intended to protect against — will travel quickly and smoothly upward in the case approximately one and one-quarter inch — to the point where the red line on the clamp will be visible in the RESET hole. Here it will wedge, without shock or jolt, grip the rope and prevent the elevator

Here is how the Safety Clamp appears when set and adjusted at the time of installation.



SET VIEW

Note the red line on the clamp—how it centers the "set hole" on the clamp case. Note also, that the clamp itself — even though clamped solidly to the wire rope is "free floating" within the case — that the base of the clamp extends somewhat below the bottom of the case. This is the "SET" position.

This setting will remain as pictured until a socket fails or starts to fail — or until a bolt starts to give away or shears off.

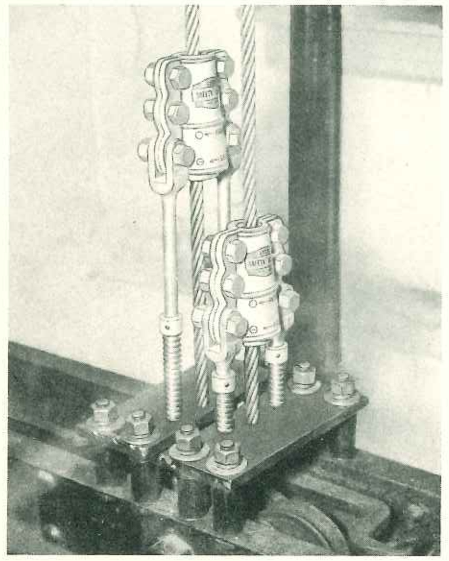


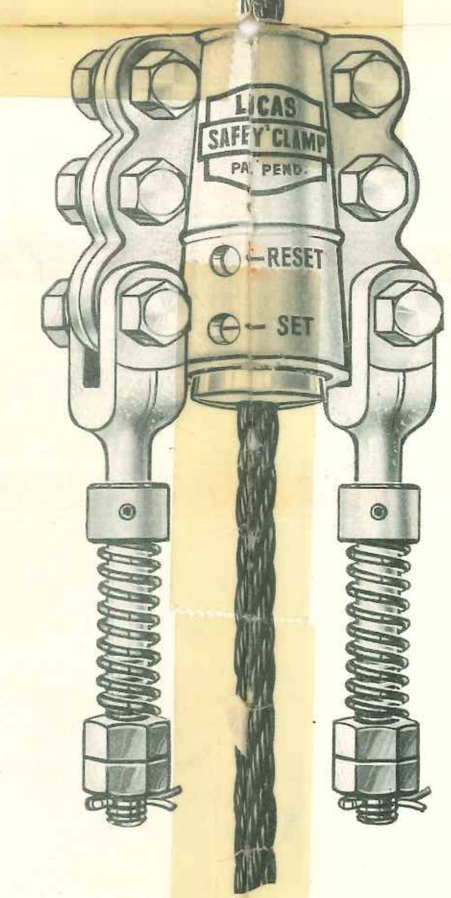
Figure 5

RAISED PLATE DRUM TYPE ELEVATOR INSTALLATION

Installation Requirements:**

- Lay out 2—½" x 4" plates. (use cardboard template)
- Prepare plates—notch out for wire ropes and drill 8—11/16" bolt holes.
- Drill necessary 11/16" holes in channel frame.
- Obtain necessary 1" pipe spacers for clearance.
- Use ⅝" bolts and lock washers in plate mounting.
- Assemble units.

Note: Staggered position of units in this installation necessitated by need for clearance between units as mounted on ropes.



ASSEMBLED VIEW

THE LUCAS ELEVATOR SAFETY CLAMP

Safety To Spare:

These powerful Safety C[illegible] have a proven and tested strength far beyon[illegible]nits of even traction steel wire rope.

This is a FACT — not an advertising slogan.

Safety is our Business

A lost life or a crippling injury cannot be measured in terms of dollars and cents. Because we believe this to be so thoroughly true, no expense was spared, no short-cuts permitted, no substitutes allowed in the development of the LUCAS ELEVATOR SAFETY CLAMP. Three years of engineering, experimentation, research and testing, all costing thousands of dollars, were engaged in before the first actual elevator installation was finally accomplished and approved.

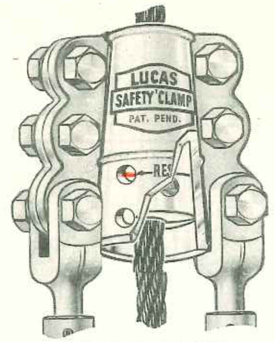
See for yourself the quality that is built into LUCAS ELEVATOR SAFETY CLAMPS.

SPECIFICATIONS

Clamp Case	● Drop Forged ● Steel — S. A. E. C1137 — hot rolled ● Tensile Strength — 70/90,000 pounds per square inch ● Brinell 152/187 ● Cadmium Plated
Clamp	● Drop Forged ● Steel — S. A. E. 1117 — hot rolled ● Cold-Hobbed — 400 ton hydraulic press ● Heat Treated (Rockwell C40-50) ● Cadmium Plated
Yoke Bolts	● Drop Forged ● Steel — S. A. E. 1137 — hot rolled ● Standard Threads ● Cadmium Plated
Yoke Bolt Springs	● 100 pound compression ● Steel Coil ● Salt Blackened
Extension Bolts	● Steel — S. A. E. 1117 — cold rolled ● ⅝" Diameter ● Cadmium Plated
Cap Screws	● Allen Type ● Salt Blackened
Bolts (other)	● Steel — cold rolled ● ⅝" Dia. S. A. E. Hex Head
Taper Pins Lock Nuts Washers	● Cadmium Plated

LUCAS ELEVATOR SAFETY CLAMPS are available for all ½" - ⅝" and ¾" 6 and 8 strand "right lay" wire rope installations.

Here is how the Safety Clamp functions and PREVENTS ACCIDENTS



RESET VIEW

The Clamp, in the event of a complete failure of a socket, or any other complete failure of an elevator part which the Clamp is intended to protect against — will travel quickly and smoothly upward in the case approximately one and one-quarter inch — to the point where the red line on the clamp will be visible in the RESET hole. Here it will wedge, without shock or jolt, grip the rope and prevent the elevator from falling.

When but a partial failure of one of the parts occurs — the clamp will leave its SET position and begin its upward travel.

When the red line on the clamp has moved from its SET position it is a WARNING to you.

This warning is made possible only by the use of LUCAS ELEVATOR SAFETY CLAMPS.

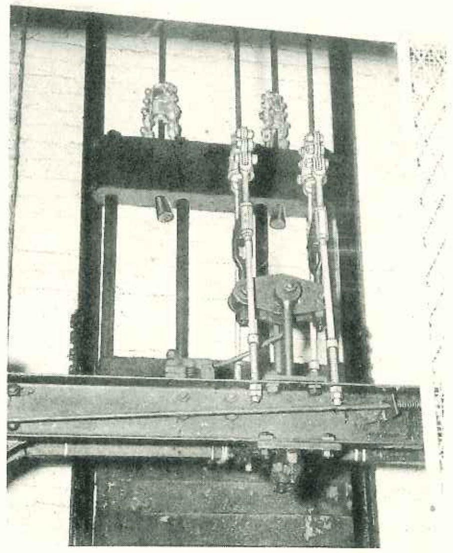


Figure 6

This installation evidences how LUCAS ELEVATOR SAFETY CLAMPS may be installed to eliminate the danger of counterweights falling . . . as well as the elevator installation itself.

Installation Requirements for Counterweights:**

- Drill and tap counterweights for ⅝" Standard Thread yoke bolts. Drill 2½" — Tap 2".
- Screw yoke bolts into weight.
- Attach wire rope clamp to wire rope.
- Assemble case and attach to yoke bolts.

Note: Counterweight installations require 4" wide counterweights with ropes in center position.

**For details of clamp setting, clamp case assembly, rope spacing, and other similar data see "Installation Section" elsewhere in this brochure.

LUCAS ELEVATOR SAFETY CLAMPS [illegible] *Protect Where You Can't Inspect!"*

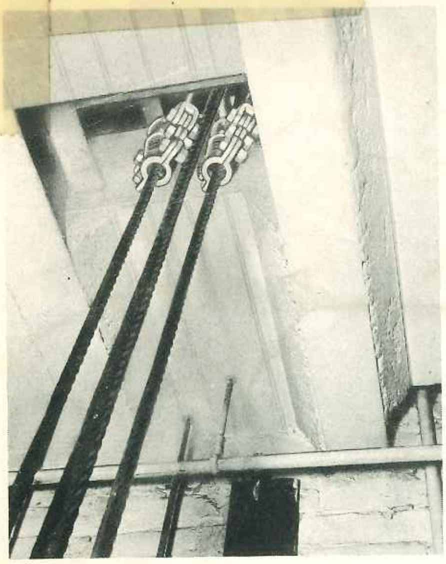


Figure 7

This illustrates the application of LUCAS ELEVATOR SAFETY CLAMPS on elevators with overhead dead end socketing. Note the inverted position of the installation.

** INSTALLATION INSTRUCTIONS **

- The first determination in any installation of LUCAS ELEVATOR SAFETY CLAMPS is to ascertain the length of yoke bolts and extension bolts needed. The bottom of the Clamp Case proper must have a minimum of 3½" clearance above the closest obstruction at the point of attachment to the elevator. See installation photographs.
- Next determine clearance between car hoist ropes. For side by side installation of Clamp Cases, minimum clearance permitted between ropes is 3". If clearance is less than 3" the Clamp Cases must be staggered. See installation Fig. 5.
- By use of cardboard template lay out necessary plates and determine position of bolt holes and notching for wire ropes. Prepare plates and install them. (Yoke bolt holes should be drilled on 4" centers (in any radius) — This is the minimum. Maximum centers must not exceed the taper of the Clamp Case which is 5 degrees — 30".)
- You are now ready to assemble and attach the unit. To do so:
  - Place yoke bolts in drilled plate holes. Loosely assemble Case around wire rope — this to determine as accurately as possible the position which the Clamp is to occupy on the rope.
  - Now remove loosely assembled Case and thoroughly clean wire rope with wire brush or grease remover.
  - Next attach Clamp to rope in determined position.

    Each Clamp is labeled for size rope it fits, i.e., ½" 6 Strand, ⅝" 8 Strand, etc. Be certain you have the proper Clamp. Tighten Clamp evenly on rope to approximate .050" clearance between Clamp halves. This is most important.

    Clamp must be attached in good "rope lay" — if "rope lay" is not proper obtain by twisting rope or socket to proper degree.
  - Then reassemble Case around the Clamp — insert taper pins — tighten all bolts thoroughly.
  - Final setting of Clamp with relation to "set hole" in Clamp Case may be accomplished by adjusting the nuts on the yoke or extension bolts at their point of attachment on the elevator.
  - Insert cotter keys when adjustment has been completed.
  - Finally, recheck for proper tightness of all bolts and Clamp setting.

FROM:

TO: